

**To:** Neale, Anne[Neale.Anne@epa.gov]; McDonald, Michael E.[McDonald.Michael@epa.gov]; Jarnagin, Taylor[Jarnagin.Taylor@epa.gov]  
**From:** Orme-Zavaleta, Jennifer  
**Sent:** Fri 8/14/2015 7:52:35 PM  
**Subject:** RE: remote sensing response to Gold King Mine spill into the Animas River

Taylor et al. Can you send me a sample output that can help convey what this capability can bring? Interest here, just need to help demonstrate what this does in a simple way to non users.  
Thanks

Sent from my Windows Phone

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**From:** Neale, Anne  
**Sent:** 8/14/2015 14:01  
**To:** Orme-Zavaleta, Jennifer; McDonald, Michael E.  
**Subject:** FW: remote sensing response to Gold King Mine spill into the Animas River

Hi Jennifer and Mike,

You may already have spoken to Blake or others but Taylor brings up a really great point about remote sensing capabilities.

Annie

Anne Neale

EnviroAtlas Project Lead

US EPA, RTP, NC

919-541-3832

**From:** Jarnagin, Taylor  
**Sent:** Friday, August 14, 2015 1:42 PM  
**To:** Neale, Anne  
**Subject:** remote sensing response to Gold King Mine spill into the Animas River  
**Importance:** High

Hi Annie,

I think this is an excellent candidate for the use of remote sensing with a multispectral or hyperspectral sensor to identify and map the sediments from the Gold King Mine spill into the Animas River.

Our local talent includes: Blake Schaeffer and Drew Pilant (both of whom could analyze imagery) and David J. Williams (who is working on putting together a sensor just for this type of occasion, unfortunately, I don't think that sensor has been fully tested and is operation right now). The Environmental Photographic Interpretation Center existed for exactly this sort of emergency response capability and to act as a liaison between the contractors who would fly and analyze the imagery and the Regions who had the boots on the ground and were directly responsible for the clean-up.

Our current contact for the capability to do this is:

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EPA National Computer Center

Office of Technology Operations and Planning

Office of Environmental Information

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Taylor

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< <http://www.epa.gov/nerlesd1/land-sci/staff/jarnagin.htm> >

Main Research Project:

"Collaborative Research: Streamflow, Urban Riparian Zones, BMPs, and Impervious Surfaces":

< <http://www.epa.gov/nerlesd1/land-sci/clarksburg01-05.htm> >